

(FILE 'HOME' ENTERED AT 18:20:20 ON 14 APR 2007)

FILE 'USPATFULL, PCTFULL' ENTERED AT 18:20:51 ON 14 APR 2007

L1 22275 FILE USPATFULL  
L2 6245 FILE PCTFULL  
TOTAL FOR ALL FILES  
L3 28520 S ALCOHOL? (5A) GEL?  
L4 1444 FILE USPATFULL  
L5 356 FILE PCTFULL  
TOTAL FOR ALL FILES  
L6 1800 S ALCOHOL? (5A) GEL? (20A) ("60%" OR "65%" OR "70%" OR "75%" OR  
L7 74 FILE USPATFULL  
L8 44 FILE PCTFULL  
TOTAL FOR ALL FILES  
L9 118 S L6 AND (CARBOMER? )  
L10 336484 FILE USPATFULL  
L11 108119 FILE PCTFULL  
TOTAL FOR ALL FILES  
L12 444603 S ( CYSTEIN OR THIAMINE OR ARGININE) OR (HYDROXIDE (5A) (SODIU  
L13 47 FILE USPATFULL  
L14 31 FILE PCTFULL  
TOTAL FOR ALL FILES  
L15 78 S L9 AND L12

=> save all

ENTER NAME OR (END):110068633/1

L# LIST L1-L15 HAS BEEN SAVED AS 'L10068633/L'

=> save l15

ENTER NAME OR (END):alcoholgel/a

ANSWER SET L15 HAS BEEN SAVED AS 'ALCOHOLGEL/A'

=>

L15 ANSWER 45 OF 78 USPATFULL on STN

SUMM . . . of alcohol and water. Preferred gelling agents for use in the present invention include the water-soluble, carboxyvinyl polymers known as **carbomers** or, by their commercial name, "CARBOPOLS" (B. F. Goodrich Chemical Co., Cleveland, Ohio). **Carbomers** are also alcohol-soluble but require neutralization for use in non-polar systems. A variety of effective neutralizing agents are known, including **sodium hydroxide, potassium hydroxide** and **sodium bicarbonate**, but preferred for the purposes of the present invention are polar organic amines such as triethanolamine and tetrahydroxypropyl ethylenediamine. Generally from about 0.2% to about 5% by weight of such neutralizing agents are sufficient to render the **carbomer**-created gels non-polar.

CLM What is claimed is:

26. A method according to claim 20 wherein the **alcohol** constitutes about **60%** of the **gel** composition by weight.

27. A method according to claim 20 wherein the **alcohol** constitutes about **75%** of the **gel** composition by weight.

28. A method according to claim 20 wherein the **alcohol** constitutes about **90%** of the **gel** composition by weight.

ACCESSION NUMBER: 91:36230 USPATFULL  
TITLE: Aqueous gels containing topical medicaments  
INVENTOR(S): Blackman, Steven, New York, NY, United States  
Ralske, Irene, North Bellmore, NY, United States  
PATENT ASSIGNEE(S): Thames Pharmacal Co., Inc., Ronkonkoma, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5013545		19910507
APPLICATION INFO.:	US 1987-130445		19871209 (7)
DISCLAIMER DATE:	20070529		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Cashion, Jr.		

L15 ANSWER 43 OF 78 USPATFULL on STN

SUMM . . . the gel product from 5 to 15% ibuprofen; 0 to 20% of a non-volatile solvent, preferably propylene glycol; 40 to 60% **alcohol**; 2.0 to 5.0% **gelling** agents; sufficient base to adjust the pH to between 3.5 and 6.0; and water. In more preferred embodiments of the. . .

DETD . . . Hercules, Inc. as KLUCEL HF), or polyacrylic acid polymer (PAA) (available from B. F. Goodrich Chemical Co. as CARBOPOL or **CARBOMER** 934P), with propylene glycol being an optional but preferred ingredient. An effective amount of ibuprofen and preferably substantially pure S-ibuprofen. . .

DETD

Ingredient	% by wt
------------	---------

Ibuprofen	5-15%
Propylene glycol	0-20%
<b>Alcohol</b> USP (Ethanol-95%)	40-60%

**Gelling Agent:**

Hydroxypropyl Cellulose  
about 2.5%

(HPC) (KLUCEL HF)  
[or polyacrylic acid polymer]  
about 4.0%

(PAA) (CARBOPOL 934P)  
H.sub.2 O q.s. to 100  
Base (e.g. Trolamine N.F.)

DETD . . . gels of the present invention, it may be possible to vary the amounts of ethanol used beyond those preferred amounts (40-60%) specified above. Preferably the amount used will produce a saturated or almost saturated solution of ibuprofen in the final **gel** preparation. The minimum amount of **alcohol** applied is that amount to dissolve the only very slightly water soluble ibuprofen (particularly at acidic pHs). Thus, one would. . .

DETD . . . the desirable range of 3.5 to 6.0. The pH is preferably adjusted by the addition of triethanolamine (trolamine N.F.), or **sodium hydroxide** or any other compatible, pharmaceutically acceptable base or alkalizing agent. The ibuprofen-hydroalcoholic gels of the present invention are useful in. . .

ACCESSION NUMBER: 92:16927 USPATFULL  
TITLE: Method for percutaneous delivery of ibuprofen using hydroalcoholic gel  
INVENTOR(S): Wisniewski, Stephen J., Doylestown, PA, United States  
Gemborys, Mark, Hatfield, PA, United States  
PATENT ASSIGNEE(S): McNeil-PPC, Inc., Milltown, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5093133		19920303
APPLICATION INFO.:	US 1990-469649		19900124 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

L15 ANSWER 42 OF 78 USPATFULL on STN

SUMM . . . of alcohol and water. Preferred gelling agents for use in the present invention include the water-soluble, carboxyvinyl polymers known as **carbomers** or, by their commercial name, "CARBOPOLS" (B.F. Goodrich Chemical Co., Cleveland, Ohio). **Carbomers** are also alcohol-soluble but require neutralization for use in non-polar systems. A variety of effective neutralizing agents are known, including **sodium hydroxide, potassium hydroxide** and **sodium bicarbonate**, but preferred for the purposes of the present invention are polar organic amines such as triethanolamine and tetrahydroxypropyl ethylenediamine. Generally from about 0.2% to about 5% by weight of such neutralizing agents are sufficient to render the **carbomer**-created gels non-polar.

SUMM It has been found that the preferred range of **alcohol** concentration for use in the **gel** compositions is from about 60 to about 80%, because formulations containing in excess of 80% alcohol, while suitable for the purposes of the invention, form less stable gels. Similarly, the preferred range of water concentrations. . . .

ACCESSION NUMBER: 92:23001 USPATFULL  
TITLE: Method of treatment for pruritus  
INVENTOR(S): Blackman, Steven T., New York, NY, United States  
PATENT ASSIGNEE(S): Thames Pharmacal Co., Inc., Ronkonkoma, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5098717		19920324
APPLICATION INFO.:	US 1991-656592		19910219 (7)
DISCLAIMER DATE:	20070529		
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1987-130445, filed on 9 Dec 1987, now patented, Pat. No. US 5013545		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

L15 ANSWER 36 OF 78 USPATFULL on STN

SUMM . . . 6 to about 8, preferably about 6.5 to 7.5) salt by neutralizing the formulation using an appropriate base, such as **sodium hydroxide**. This observation of enhancement of the transdermal drug delivery at neutral pH was unexpected since it was originally thought that. . .

DETD . . . purpose and examples include inorganic salt, such as the sodium or other alkali or alkaline earth metal salts such as **hydroxides**, e.g., **sodium hydroxide** or **potassium hydroxide**; **ammonium** salt; or organic salt, especially amine salt, such as, for example, diethylamine; diethanolamine, triethanolamine, diisopropanolamine, N-methylglucamine, ethanolamine, isopropylamine, tetrahydroxypropyl ethylene. . .

DETD This example shows the effect of incorporating propylene glycol in the aqueous **alcoholic gel** formulation containing 5% ibuprofen and 10% 2-n-nonyl-1,3-dioxolane using an ethanol:water vehicle at a 70:30 weight mixing ratio. The compositions used in these tests are shown in Table 3 (NaOH is added to adjust the. . .

DETD . . . 5 5  
2-n-nonyl-1,3 10 0  
dioxolane  
Ethanol 59 65  
Propylene glycol 17 19  
Water 7 9  
Hydroxypropyl 2 2  
cellulose  
**Sodium Hydroxide** q.s. to pH 7 q.s. to pH 7

DETD The commercially available products were: Gelufene® (ibuprofen 5%, isopropyl alcohol, hydroxyethylcellulose, **sodium hydroxide**, benzyl alcohol and purified water), Dolgit® cream (ibuprofen 5%, medium chain triglycerides, mixture of glycerol monostearate and polyoxyethylene stearates, polyoxyethylene. . . glycol, parahydroxybenzoate of methyl soda), Ibutop® (ibuprofen 5%) (Laboratoire Chefaro-Ardeval, Saint-Denis Cedex, France) and Deep Relief.TM. gel (ibuprofen 5%, menthol, **Carbomer**, propylene glycol, di-isopropanolamine, ethanol, purified water).

DETD . . . 80/20 mixture of PBS and ethanol was used as the receptor fluid, and the pH was adjusted to 7.7 with **sodium hydroxide**; the test compositions which were prepared and tested (the enhancer was 2-n-nonyl-1,3-dioxolane) are shown in the following Table 6:

ACCESSION NUMBER: 1999:136716 USPATFULL  
TITLE: Non-steroidal antiinflammatory drug formulations for topical application to the skin  
INVENTOR(S): Samour, Carlos M., Bedford, MA, United States  
Krauser, Scott F., Tyngsboro, MA, United States  
Gyurik, Robert J., Exeter, NH, United States  
PATENT ASSIGNEE(S): MacroChem Corporation, Lexington, MA, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5976566		19991102
APPLICATION INFO.:	US 1997-921057		19970829 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

L15 ANSWER 26 OF 78 USPATFULL on STN

SUMM [0029] In alternative embodiments, the gel comprises a mixture of water (10-50%), **alcohol** (30-90%), a **zinc gel** (a combination of quaternary cationic hydroxy ethyl cellulose (0.1-0.3%) and triple zinc salt mixture containing zinc gluconate (0.1-2.0%), zinc acetate.

SUMM . . . alginate, ammonium chloride, ammonium sulfate, amylopectin, attapulgate, bentonite, C9-15 alcohols, calcium acetate, calcium alginate, calcium carrageenan, calcium chloride, caprylic alcohol, **carbomer 910, carbomer 934, carbomer 934P, carbomer 940, carbomer 941**, carboxymethyl hydroxyethyl cellulose, carboxymethyl hydroxypropyl guar, carrageenan, cellulose, cellulose gum, cetearyl alcohol, cetyl alcohol, corn starch, damar, dextrin, dibenzlidine.

SUMM . . . pH adjusters such as ammonia, mono-, di- and tri-alkyl amines, mono-, di- and tri-alkanolamines, alkali metal and alkaline earth metal **hydroxides** (e.g., ammonia, **sodium hydroxide, potassium hydroxide, lithium hydroxide**, monoethanolamine, triethylamine, isopropylamine, diethanolamine and triethanolamine); acid pH adjusters such as mineral acids and polycarboxylic acids (e.g., hydrochloric acid, nitric.

SUMM . . . foregoing irritants include, but are not limited to, means for hair removal (e.g. depilatories, waxing and razors), hair relaxants (e.g. **sodium hydroxide, calcium hydroxide**, thioglycolates), antiperspirants (e.g. aluminum chlorhydrate and other aluminium salts), dermatological treatments (e.g. alpha hydroxy acids (AHAs), especially glycolic and trichloroacetic.

ACCESSION NUMBER: 2004:133892 USPATFULL

TITLE: Zinc salt compositions for the prevention of dermal and mucosal irritation

INVENTOR(S): Modak, Shanta M., River Edge, NJ, UNITED STATES  
Shintre, Milind S., New York, NY, UNITED STATES  
Caraos, Lauser, Hollis, NY, UNITED STATES  
Gaonkar, Trupti, New York, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004102429	A1	20040527
APPLICATION INFO.:	US 2003-622272	A1	20030717 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2003-US3896, filed on 7 Feb 2003, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-355549P	20020207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BAKER & BOTTS, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112	
NUMBER OF CLAIMS:	30	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1884	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 27 OF 78 USPATFULL on STN

SUMM . . . alginate, ammonium chloride, ammonium sulfate, amylopectin, attapulgate, bentonite, C9-15 alcohols, calcium acetate, calcium alginate, calcium carrageenan, calcium chloride, caprylic alcohol, **carbomer 910, carbomer 934, carbomer 934P, carbomer 940, carbomer 941**, carboxymethyl hydroxyethyl cellulose, carboxymethyl hydroxypropyl guar, carrageenan, cellulose, cellulose gum, cetearyl alcohol, cetyl alcohol, corn starch, damar, dextrin, dibenzlidine.

SUMM . . . adjusters such as ammonia, mono-, di- and tri- alkyl amines,

mono-, di- and tri-alkanolamines, alkali metal and alkaline earth metal hydroxides (e.g., ammonia, sodium hydroxide, potassium hydroxide, lithium hydroxide, monoethanolamine, triethylamine, isopropylamine, diethanolamine and triethanolamine); acid pH adjusters such as mineral acids and polycarboxylic acids (e.g., hydrochloric acid, nitric. . . .  
SUMM . . . . water indicated was added last to the other ingredients to bring the total volume to 100 percent.

1. An antisapctic alcohol gel comprising:

zinc gluconate	0.8	percent
zinc oxide	0.2	percent
ethyl alcohol	65.0	percent (volume/volume)
hydroxy methyl propyl cellulose (K100M)	0.3	percent
Ucare JR 400 (polyquaternium-10) (Amerchol Corp.)	0.15	percent
Incroquat Behenyl TMS (Croda, Inc.)	1.0	percent
Polawax A-31	1.0	

DETD [0035] Sensiva SC50 and/or benzalkonium chloride ("BZK") were added, in various concentrations, to the following alcohol gel base:

ethyl alcohol (volume/volume)	65	percent
hydroxy methyl propyl cellulose (K100M)	0.3	percent
hydroxy propyl cellulose (HF)	0.1	percent (volume/volume)
Glucam P20	1.0	percent (volume/volume)
Glucam P20 distearate	1.5	

ACCESSION NUMBER: 2003:219354 USPATFULL  
TITLE: Gentle-acting skin-disinfectants  
INVENTOR(S): Modak, Shanta, Riveredge, NJ, UNITED STATES  
Gaonkar, Trupti A., New York, NY, UNITED STATES  
Sampath, Lester, Nyack, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003152644	A1	20030814
	US 6846846	B2	20050125
APPLICATION INFO.:	US 2001-47631	A1	20011023 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	BAKER BOTTS L.L.P., 44TH FLOOR, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112-0228		
NUMBER OF CLAIMS:	40		
EXEMPLARY CLAIM:	1		

=> d his

(FILE 'HOME' ENTERED AT 16:20:15 ON 14 APR 2007)

FILE 'USPATFULL' ENTERED AT 16:23:55 ON 14 APR 2007

L1	480346	S	METHANOL OR ETHANOL OR PROPANOL OR ISOPROPANOL OR BUTANOL OR
L2	4028	S	CARBOMER AND ((SODIUM OR POTASSIUM OR AMMONIUM OR MAGNESIUM)
L3	3272	S	L1 AND L2
L4	2145	S	VISCOSITY AND L3
L5	26861	S	HIGH (10A) ALCOHOL?
L6	167	S	L5 AND L4
L7	27203	S	CONCENT? (10A) ALCOHOL?
L8	34	S	L7 AND L6
L9	280	S	L7 AND L2
L10	162	S	VISCOSITY AND L9

=> d 130-149 kwic, ibib



or "carbopols" (Carbopol® is in actual fact a registered mark of the B. F. Goodrich company). In particular, the acrylate/alkyl. . .

SUMM . . . 5984, preferably polyacrylates from the group consisting of the carbopols of the types 980, 981, 1382, 2984, 5984 and particularly preferably **Carbomer** 2001.

SUMM [0078] Suitable aminoalcohols are, for example, 2-aminoethanol, 2-(N-methylamino)-**ethanol**, 3-aminopropanol or 4-aminobutanol.

SUMM [0085] The K value, also designated as intrinsic **viscosity**, can be determined simply by **viscosity** measurements of polymer solutions and is therefore a frequently used parameter in the technical field for the characterization of polymers. . .

SUMM [0087]  $\eta_{\text{sub.r}}$ =relative **viscosity** (dynamic **viscosity** of the solution/dynamic **viscosity** of the solvent) and

SUMM . . . polyurethanes. As a base for the neutralization of the polyurethanes, it is possible to use alkali metal bases such as **sodium hydroxide** solution, **potassium hydroxide** solution, **sodium** carbonate, **sodium** hydrogen-carbonate, **potassium** carbonate or **potassium** hydrogencarbonate and alkaline earth metal bases such as calcium **hydroxide**, calcium oxide, **magnesium hydroxide** or **magnesium** carbonate and also ammonia and amines. 2-Amino-2-methylpropanol, dimethylolaminopropylamine and triisopropanolamine have proven particularly suitable for the neutralization of the polyurethanes. . . groups can also be carried out with the aid of mixtures of two or more bases, for example mixtures of **sodium hydroxide** solution and triisopropanolamine. Depending on the intended use, the neutralization can be carried out partially, for example to 20 to. . .

SUMM [0195] 3. **Alcohols** are distinguished by rapid activity, but only at relatively **high concentrations** of about 40-80%.

SUMM [0240] The aliphatic alcohols **ethanol**, 1-**propanol** and 2-**propanol** have long been known as active compounds for the disinfection of skin and hands or for antiseptics of the skin. . .

SUMM [0241] Alcohols possess a bactericidal action which increases from **methanol** to **propanol**. **Ethanol**, n-**propanol** and **isopropanol** are especially used, the alcohol content of the preparations in general being between 50 and 80%. The significant advantage of. . . is in fact discussed, but only on the other side of a high concentration limit, which in the case of **ethanol** is presumed to be at about 80%.

SUMM [0243] In a particularly advantageous embodiment, the antiseptic is composed as follows:

(a) 42-47% by weight	of 1- <b>propanol</b>
(b) 22-27% by weight	of 2- <b>propanol</b>
(c) 4-6% by weight	of <b>ethanol</b>
(d) at least 20% by weight	of water
(e) at most 0.0001% by weight	of substances which are present as solids under. . .

SUMM [0246] Accordingly, also advantageous is the use of a preparation of

(a) 42-47% by weight	of 1- <b>propanol</b>
(b) 22-27% by weight	of 2- <b>propanol</b>
(c) 4-6% by weight	of <b>ethanol</b>
(d) At least 20% by weight	of water
(e) At most 0.0001% by weight	of substances which are present as solids under. . .

ACCESSION NUMBER: 2004:226959 USPATFULL

TITLE: Silicone-based moisture absorbing matrix, particularly

INVENTOR(S):

for caring for wounds and/or for the  
pharmaceutical/cosmetic treatment of skin  
Woller, Karl-Heinz, Hamburg, GERMANY, FEDERAL REPUBLIC  
OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004175344	A1	20040909
APPLICATION INFO.:	US 2004-472872	A1	20040423 (10)
	WO 2002-EP3227		20020322

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2001-10114382	20010323
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ALSTON & BIRD LLP; BANK OF AMERICA PLAZA, 101 SOUTH TRYON STREET, SUITE 4000, CHARLOTTE, NC, 28280-4000	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	

L8 ANSWER 22 OF 34 USPATFULL on STN

AB . . . antimicrobials caused by octoxyglycerin. Hydroalcoholic gel composition containing alcohol, water, hydrogel, and emollient or emulsifier, wherein the composition has a **viscosity** of below 2000 centipoises at between 20 and 40° C. This skin-friendly hydroalcoholic gel composition, which can be further combined. . .

SUMM . . . these gel compositions comprise a low concentration of hydrogel soluble in water at ambient temperatures in combination with a low **concentration** of emulsifier soluble in alcohol at ambient temperature or a low **concentration** of emollient or mixtures thereof, such that the hydroalcoholic gel formulation has a low **viscosity**, preferably below 2000 centipoises at 20 to 40° C.

SUMM . . . skin disinfectants have been developed that use alcohol as the primary antimicrobial agent. There are two general problems associated with alcohol-based disinfectants. First, the effective **concentration** of alcohol, generally regarded to be greater than about 60 percent weight (hereafter, all percentages should be considered weight/volume percentages, unless specified otherwise) of **ethanol**, or its equivalent, is irritating to the skin, causing dryness and consequent peeling and cracking. Because chapped skin tends to. . .

SUMM [0010] U.S. Pat. No. 4,956,170 by Lee, issued Sep. 11, 1990 relates to a **high alcohol** content antimicrobial gel composition which comprises various emollients and a humectant to protect the skin from the drying effects of. . .

SUMM . . . typically 1-15 percent. Compositions disclosed in U.S. Pat. No. 5,885,562 may further comprise a short chain monohydric alcohol such as **ethanol** at a level of between 20 and 80 percent. Formulations useful as deodorants, however, would differ from those used as. . .

SUMM . . . wherein each emulsifier is present in at least 0.05% by weight, wherein the composition free of auxiliary thickeners has a **viscosity** of at least 4000 centipoise at 23° C., and wherein each emulsifier is comprised of at least one hydrophilic group.

SUMM . . . an antimicrobial alcohol-containing composition containing specified antimicrobial compositions in solution with greater than 30% by volume of alcohol and a **carbomer** polymer thickener having a **viscosity** of greater than 9000 centipoise. Optional ingredients further include essential oils, tack modifiers, fragrances, emollients, pH adjusters, **viscosity** modifiers, transdermal enhancers, surfactants, dyes, colors and water.

SUMM . . . base composition made of a panthenol moisturizer and an emollient such as a polyhydric alcohol humectant and polyether derivative. The **viscosity** of these compositions are disclosed to range generally from 2,000 to 20,000 cps.

SUMM . . . product having white petrolatum and dimethicone as active ingredients, and also includes cyclomethicone as an emollient; polyethylene and silica as **viscosity** builders; mineral oil as a moisturizer/emollient, propylparaben as a preservative and fragrance.

SUMM . . . water, Stearyl Alcohol, Cyclomethicone, C12-15 Alkyl Benzoate, Cetyl Lactate, Cocamidopropyl PG-Dimonium Chloride Phosphate, Glycerin, PEG-4, Propylene Glycol, Tocopheryl Acetate, Aminomethyl **Propanol**, **Carbomer**, Styrene/Acrylates Copolymer, Fragrance (Parfum), Diazolidinyl Urea, Iodopropynyl Butylcarbamate, Methylparaben, and Propylparaben; for Purell Original are water, Glycerin, Isopropyl Myristate, Propylene Glycol, Tocopheryl Acetate, Aminomethyl **Propanol**, **Carbomer**, and Fragrance (Parfum); for Purell with Aloe are: water, Aloe Barbadensis Leaf Juice, Glycerin, Isopropyl Myristate, Propylene Glycol, Tocopheryl Acetate, Aminomethyl **Propanol**, **Carbomer**, Fragrance (Parfum), Blue 1 (CI 42090), Yellow 5 (CI 19140); and for Purell Kid's Own are water, Isopropyl Myristate, Propylene Glycol, Aminomethyl **Propanol**, **Carbomer**, Fragrance (Parfum), and Red 33.

DETD . . . more alcohol. Alcohols which may be used according to the invention include aliphatic alcohols, including, but not limited, most preferred **ethanol** or isopropyl **alcohol**, but also n-propyl **alcohol**, and mixtures thereof, at **concentrations** between about 20 and 85 percent and preferably 40 to 70 percent. Suitable alcohols also include fatty alcohols, such as cetyl alcohol, myristyl alcohol, stearyl **alcohol**, octyl **alcohol**, decyl **alcohol**, lauryl **alcohol**, and combinations thereof, at **concentrations** between about 0.5 and 5 percent. The present invention further provides for compositions comprising, as at least one **alcoholic** component, hexanol at a **concentration** of between three and ten percent and preferably about 5 percent.

DETD . . . Modak et al., incorporated by reference herein). Preferred zinc compounds for use according to the invention are, for a disinfecting **alcohol** gel, zinc gluconate and zinc oxide, at **concentrations** between 0.1 and 1 percent, and preferably 0.8 percent zinc gluconate and 0.2 percent zinc oxide; for an antiseptic aqueous.

DETD . . . alginate, ammonium chloride, ammonium sulfate, amylopectin, attapulgate, bentonite, C.sub.9-15 alcohols, calcium acetate, calcium alginate, calcium carrageenan, calcium chloride, caprylic alcohol, **carbomer** 910, **carbomer** 934, **carbomer** 934P, **carbomer** 940, **carbomer** 941, carboxymethyl hydroxyethyl cellulose, carboxymethyl hydroxypropyl guar, carrageenan, cellulose, cellulose gum, cetearyl alcohol, cetyl alcohol, corn starch, damar, dextrin, dibenzylidene.

DETD . . . pH adjusters such as ammonia, mono-, di- and tri-alkyl amines, mono-, di- and tri-alkanolamines, alkali metal and alkaline earth metal **hydroxides** (e.g., ammonia, **sodium hydroxide**, **potassium hydroxide**, lithium **hydroxide**, monoethanolamine, triethylamine, isopropylamine, diethanolamine and triethanolamine); acid pH adjusters such as mineral acids and polycarboxylic acids (e.g., hydrochloric acid, nitric.

DETD . . . three percent or less of emollient dissolved in alcohol or three percent or less of emulsifier wherein said compositions have **viscosities** below 4000 centipoises at between 20 and 40° C. These percentages and further percentages discussing these hydroalcoholic gel compositions should. . . percent water, 0.05 to 0.5 percent hydrogel and 0.2 to 3.0 percent emollient and/or 0.05 to 0.5 percent emulsifier with **viscosities** of less than 2000 cps, most preferably between 50-500 cps. Additional embodiments of this invention further include silicone polymer, emollient solvent, antimicrobial agent, and thickening agent, while maintaining the low **viscosities** as preferred.

DETD . . . alcohol, and mixtures thereof; fatty alcohols, including, but not limited to, cetyl alcohol, myristol alcohol, stearyl alcohol, octyl alcohol, decyl **alcohol** and lauryl **alcohol**, and mixtures thereof; and hexanol. The **concentration** of **alcohol** may be between 30 and 95 percent, preferably between 40 and 70 percent; preferably the aliphatic **alcohols** is **ethanol** or isopropyl **alcohol** at a **concentration** between and 60 and 95 percent; when present, the **concentration** of fatty **alcohols** is preferably between 0.5 and 5.0 percent; and, when present, the concentration of hexanol is preferably between 3 and 10.

DETD . . . (Ucon 50-HB-660, Union Carbide). Preferably the emollient is present at a concentration of three percent or less, such that the **viscosity** of the composition is preferably less than 2000 centipoise at 20 to 40° C., more preferably between 0.2 and 3.

DETD . . . self-emulsifying waxes that are preferably soluble in alcohol at ambient temperature including Incroquat Behenyl TMS, Incroquat Behenyl TMS-50, Polawax, stearyl **alcohol** and cetearyl

**alcohol**. These emulsifiers are present at a **concentration** between 0.05 and 3.0 percent. Emulsifiers to this invention preferably include Incroquat Behenyl TMS, which is a mild cationic emulsifier. . . .

DETD . . . . according to this invention relating to hydroalcoholic gel compositions include the thickening agents and gelling agents discussed above, preferably behenyl **alcohol**, crodamol, and crothix. Suitable **concentration** of thickening agent are between 0.05 and 1.0 percent. Gelling agents such as Caropol are not preferred due to their high **viscosity** and their requiring neutralizing agents to neutralize the gelling agent with alkaline materials.

DETD . . . . three percent. More than one antimicrobial agents may be used in combination, such as chlorhexidine gluconate, benzalkonium chloride and phenoxy **ethanol**, preferably at a concentration of between 0.05 and 0.5 percent, 0.1 and 0.25 percent, and 0.1 and 1.0 percent, respectively.. . .

DETD . . . . Corp.)

hydroxypropylmethylcellulose (K-100)	0.15 percent
(Dow Corning)	
Polyox WSR 301 (polyethyleneoxide)	0.03 percent
(Dow Corning)	
Incroquat	0.4 percent
(Croda, Inc.)	
Polawax A-31	0.4 percent
(Croda, Inc.)	
polyethylene glycol	0.25 percent
<b>ethanol</b>	63.5 percent (volume/volume)
Glucam E-20	0.4 percent
(Amerchol Corp.)	
Silicone 225	0.1 percent (volume/volume)
(Dow Corning)	
Sensiva SC50	2.0 percent (volume/volume)
phenoxyethanol	1.0 percent
chlorhexidine digluconate	0.05 . . .
DETD . . . . cellulose (K100)	0.2 percent
(Dow Corning)	
Polyox WSR 301 (polyethyleneoxide)	0.1 percent
(Dow Corning)	
Incroquat	0.4 percent
(Croda, Inc.)	
Polawax A-31	0.4 percent
(Croda, Inc.)	
propylene glycol	1.0 percent
<b>ethanol</b>	63.5 percent
(volume/volume)	
Glucam E-20	0.4 percent
(Amerchol Corp.)	
Masil SF 19 CG surfactant	1.0 percent
phenoxyethanol	1.0 percent
Sensiva SC50	1.0 percent (volume/volume)
chlorhexidine digluconate. . .	
DETD [0061]	

5. An antimicrobial scrub gel, for example for pre-operative skin disinfection, comprising:

<b>ethanol</b>	35 percent (volume/volume)
<b>isopropanol</b>	35 percent (volume/volume)
zinc gluconate	0.5 percent
zinc oxide	0.2 percent
hydroxy methyl propyl cellulose (K100M)	0.3 percent
Germall Plus	0.25 percent

(ISP Sutton Laboratories)

hexanol. . .

DETD . . . for example

for pre-operative skin disinfection, comprising:

water	23.28 percent (volume/volume)
Polyox WSR 205	0.2 percent
U-care JR 400	0.2 percent
<b>ethanol</b> (95%)	65 percent (volume/volume)
propylene glycol	3 percent
Sensiva SC50	2 percent (volume/volume)

(Sample 14)

Ingredients	percentage (w/w)
-------------	------------------

Water	26.8
U care JR30	0.3
<b>Ethanol</b>	70
Octoxy Glycerin	2
Silicone Glycol (BASF 1066-DCG Polyol)	0.2
Chlorhexidine gluconate	0.05
Benzalkoniumchloride	0.12
Phenoxyethanol	0.5

ACCESSION NUMBER: 2004:279927 USPATFULL

TITLE: Gentle-acting skin-disinfectants and hydroalcoholic gel formulations

INVENTOR(S): Modak, Shanta, Riveredge, NJ, UNITED STATES  
Gaonkar, Trupti A., New York, NY, UNITED STATES

NUMBER	KIND	DATE
--------	------	------

PATENT INFORMATION:	US 2004219227	A1	20041104
---------------------	---------------	----	----------

APPLICATION INFO.:	US 2004-786681	A1	20040225 (10)
--------------------	----------------	----	---------------

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2002-US33865, filed on 23 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-47631, filed on 23 Oct 2001, PENDING

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAKER & BOTTS, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112

L10 ANSWER 143 OF 162 USPATFULL on STN.

SUMM . . . . . to a pH of about 3.5-7.0, using an acid e.g. hydrochloric acid phosphoric acid, or a base e.g. diethanolamine, triethanolamine, **sodium hydroxide**, or known buffering agents, e.g. phosphates such as monobasic sodium phosphate, and dibasic sodium phosphate, and citrates well known in. . . .

SUMM An acid such as hydrochloric acid or a base such as diethanolamine, triethanolamine (trolamine), or **sodium hydroxide** is used to adjust the pH to between 3.5 to 7.0.

SUMM Alternatively, a buffering agent such as monobasic or dibasic **sodium** phosphate with **sodium hydroxide** or phosphoric acid can be used for pH adjustment.

SUMM Cetyl alcohol is an emollient and a emulsion stabilizer/**viscosity** increasing agent in the cream and can be replaced by cetostearyl alcohol, stearyl alcohol, cetyl esters wax, spermaceti wax or. . . .

SUMM Stearic acid is present as an emulsifier and a **viscosity** enhancer.

SUMM A buffering agent such as monobasic or dibasic **sodium** phosphate with **sodium hydroxide** or phosphoric acid is added to achieve a final pH between 3.5 and 7.0.

SUMM TABLE C

Ingredients	Concentration Wt %	
	Operable	Preferred
Water	qs	qs
Cetyl alcohol	1-10	2-5
Stearyl alcohol	1-10	2-5
Isopropyl myristate	1-10	5-10
Cetyl palmitate	1-20	1-10
Polysorbate 60	1-15	1-10
Sorbitan monostearate.		

SUMM An acid such as hydrochloric acid or a base such as diethanolamine, triethanolamine (trolamine), or **sodium hydroxide** is used to adjust the pH to between 3.5 to 7.0.

SUMM Cetyl palmitate is an emollient and an emulsion stabilizer/**viscosity** increasing agent and can be replaced by cetyl esters wax or its various ester components, spermaceti wax, or a white. . . .

SUMM An acid such as hydrochloric acid or a base such as diethanolamine, triethanolamine (trolamine), or **sodium hydroxide** is used to adjust the pH to between 3.5 to 7.0.

SUMM Alternatively, buffering agents such as monobasic or dibasic **sodium** phosphate with **sodium hydroxide** or phosphoric acid or citric acid in combination with dibasic sodium phosphate can be used to adjust the pH.

SUMM TABLE E

Ingredients	Concentration Wt %	
	Operable	Preferred
Water	qs	qs
Ethanol	10-80	20-60
Polysorbate 80	1-10	2-8
<b>Carbomer</b> 934P	0.5-3	0.5-2
Edetate disodium	0.005-0.1	0.01-0.1
Steroid	0.01-2.5	0.01-0.1
Antifungal	0.5-10	1-8

SUMM A base such as diisopropanolamine, diethanolamine, triethanolamine (trolamine), or **sodium hydroxide** is used to adjust the pH to between 3.5 to 7.0.

SUMM An acid such as hydrochloric acid or a base such as diethanolamine,

triethanolamine (trolamine), or **sodium hydroxide** is used to adjust the pH to between 3.5 to 7.0.

SUMM Alternatively, a buffering agent such as monobasic or dibasic **sodium** phosphate with **sodium hydroxide** or phosphoric acid can be used for pH adjustment.

SUMM An acid such as hydrochloric acid or a base such as diethanolamine, triethanolamine (trolamine), or **sodium hydroxide** can be used to adjust the pH to between 3.5 to 7.0.

SUMM Alternatively, buffering agents such as monobasic or dibasic **sodium** phosphate with **sodium hydroxide** or phosphoric acid or a combination of citric acid with dibasic sodium phosphate can be used to adjust the pH.

CLM What is claimed is:

. . . the optional acid is chosen from hydrochloric acid and phosphoric acid, the optional base is chosen from diethanolamine, triethanolamine, and **sodium hydroxide**, the optional buffering agent is chosen from monobasic sodium phosphate and dibasic sodium phosphate, and the preservative is chosen from. . .

ACCESSION NUMBER: 2000:74321 USPATFULL

TITLE: Antifungal/steroid topical compositions

INVENTOR(S): Quigley, Jr., John W., Foster City, CA, United States  
Hou, Sui Yuen Eddie, Foster City, CA, United States  
Chaudhuri, Bhaskar, Cupertino, CA, United States

PATENT ASSIGNEE(S): Penederm, Inc., Foster City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6075056		20000613
APPLICATION INFO.:	US 1997-943574		19971003 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Dees, Jose' G.		
ASSISTANT EXAMINER:	Pryor, Alton		
LEGAL REPRESENTATIVE:	Cooley Godward LLP		



CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 31 OF 34 USPATFULL on STN

TI **High alcohol** content aerosol antimicrobial mousse

AB This invention relates to a **high alcohol** content aerosol antimicrobial mousse which is dispensed as a foam for use as an antiseptic. The mousse composition comprises (1) 85-98% of an intermediate concentrate and (2) 2-15% of a hydrocarbon propellant. The intermediate **concentrate** comprises from 52-75% by weight of **ethanol** or isopropyl alcohol; from 0.1% to 1.5% by weight of a water-dispersible polymeric gelling agent; an amphiphilic system consisting of from 0.5% to. . . .

SUMM The invention relates to an aerosol antimicrobial mousse-producing composition with a **high** level of **alcohol** as an active ingredient. The composition delivers a stable, disinfecting foam which breaks on pressure application to provide a creamy. . . .

SUMM It is well known that compositions containing at least 52% by weight of **ethanol** or isopropyl alcohol are antibacterial and, thus, widely accepted for disinfecting purposes.

SUMM Compositions with **high alcohol** content for disinfecting the hands are available as an antimicrobial alcoholic gel as described in U.S. Pat. No. 4,956,170 to. . . .

SUMM . . . . 35% alcohol, 40% of a 1% solution of Carbopol®941 (as a thickener) neutralized by diisopropanolamine, and a fluorocarbon propellant. Such **alcoholic** foaming formulations, however, have **concentrations** of **alcohol** lower than the 52% **concentration** normally required for suitable antimicrobial activity. Additionally, use of fluorocarbon propellants is undesirable for the deleterious effect on the environment. . . .

SUMM . . . . employed to cleanse skin as taught in U.S. Pat. No. 4,806,262 to Snyder. However, such preparations do not possess the **high alcohol** content required for antibacterial effect. The **alcohol** employed in amounts to 5% is used as an emollient and a mousse stabilizer. The propellants used in Snyder, nitrous. . . .

SUMM . . . . a stable foam which will not collapse until subjected to the pressure of a mechanical action. However, the presence of **alcohols** in **high concentration**, until now, has often caused foams to collapse.

SUMM . . . . the '152 Klausner patent are recited. Among the compositions listed were an aerosol men's cologne foam containing 53% by weight **ethanol** and an aerosol rubbing compound containing 59.1% by weight **ethanol**. The propellants used by Sanders were preferred to be chlorofluorocarbons, although aliphatic hydrocarbons are also disclosed. The solubility characteristics of. . . .

SUMM . . . . to Mackles is directed to an anhydrous aerosol foam. Mackles Example I4 relates to a hair cleaning foam containing 45% **ethanol** and only 5% water. A silicone resin is the foaming agent and a fluorocarbon propellant is used. Examples 16 and. . . .

SUMM . . . . teaches cleaning dentures with an aerated foam. The foamable liquid cleanser includes 1-10% surfactant, 0.1-10% humectant, 25-60% water and 35-70% **ethanol** or isopropyl alcohol. The foam is non-pressurized. In use the cleaner is forced into an air-mixer to form a foam.

SUMM . . . . the form of a mousse. Beutler teaches a creamy, oil-in-water emulsion using nitrous oxide or carbon dioxide as the propellant. **Alcohols** of long-chain fatty acids in **concentrations** of 0.5-4.5% are employed, but no **ethanol** or **isopropanol** is used.

SUMM . . . . aerosol hair composition having water and alcohol phases. The alcohol phase includes 0.5% to 20% of an alcohol, such as **ethanol**, as a secondary solvent. The alcohol phase further contains a long-chain nonionic ester and a foam-forming agent. The water phase contains water, a film-forming resin and a corrosion inhibitor.

The mousse composition also contains **ammonium hydroxide** with isobutane as the propellant.

SUMM . . . provides a very persistent foam which is said to last from 40 to 240 minutes. There is no disclosure of **high** amounts of **alcohol** being present nor of the collapse of the foam upon being subjected to pressure.

SUMM This invention encompasses a **high alcohol** content aerosol antimicrobial mousse composition which includes (I) an intermediate **concentrate** in amounts from about 85% to 98% of the total weight of the mousse composition and (II) a propellant in . . . of the total weight of the mousse composition. The intermediate concentrate includes from about 52% to 75% by weight of **ethanol**, **isopropanol** or mixtures thereof; from about 0.1 to 1.5% by weight of a water-dispersible polymeric gelling agent; from about 1.0% to . . .

SUMM In a preferred embodiment the invention is directed to a **high alcohol** content mousse adapted for disinfectant and hospital uses. It is recognized by the Food and Drug Administration that a composition having a minimum of about 54% by weight of **ethanol** is considered to be antimicrobial because it is capable of killing gram positive and gram negative bacteria upon contact. The . . .

SUMM The mousse composition of the invention includes an intermediate concentrate of active ingredients and a hydrocarbon propellant for the intermediate **concentrate**. The intermediate **concentrate** includes an **alcohol**, a gelling agent, an amphiphilic nonionic stabilizer, and an aqueous carrier.

SUMM . . . the present invention is best evidenced in the presence of about 52% to 75% by weight of an alcohol, preferably **ethanol** or isopropyl alcohol, or mixtures thereof. The alcohol may be either pure alcohol or denatured alcohol. A more preferred alcohol is **ethanol** and, most preferably, a denatured alcohol, Specially Denatured (SD) Alcohol 40-A. SD Alcohol 40-A is anhydrous alcohol which is denatured. . . .

SUMM . . . also to be found listed in the CTFA (Cosmetic, Toiletry, and Fragrance Association), 3rd Edition, 1982, under the adoptive name "**Carbomer**." They are commercially available under the tradenames CARBOPOL® 934, 940, 941, 951 from B.F. Goodrich Chemicals Group of Cleveland, Ohio. **Carbomer** 951 is a more preferred gelling agent. **Carbomer** 951 is the same product as **Carbomer** 941, except that it is prepared in a benzene-free system, since the solvent used in its production is ethyl acetate.

SUMM Since the gelling ability of the preferred acrylic polymer thickeners is affected by the **high alcohol** content of the **concentrate**, it is best to maintain their gelling capability by neutralizing them. Accordingly, optimum thickening results are attained when the carboxyl. . . .

SUMM Appropriate neutralizing agents include triethanolamine, **sodium hydroxide**, monoethanolamine and dimethyl stearylamine. Other neutralizing agents may be used, such as  $\text{HO}(\text{C}_{\text{sub } m}\text{H}_{\text{sub } 2m})_{\text{sub } 2}\text{NH}$  where m has the value of from 2 to 3 and aminomethyl **propanol**, aminomethyl propanediol, and ethoxylated amines, i.e.,  $\text{H}(\text{OCH}_{\text{sub } 2}\text{CH}_{\text{sub } 2})_{\text{sub } x}\text{RN}(\text{CH}_{\text{sub } 2}\text{CH}_{\text{sub } 2}\text{O})_y\text{H}$ , where R is a hydrocarbon radical having from 10 to . . .

SUMM The polymeric gelling agent is employed in amounts sufficient to provide the intermediate concentrate with sufficient **viscosity**, to render it pourable and to form a stabilized foam with the propellants. For this and other purposes from about. . . .

SUMM The foam **viscosity** of the mousse foam is an indicator of the stability of the dispensed mousse. The foam **viscosity** at room temperature (20° -22° C.) should be from 2,000 to 40,000 centipoise --"cps" (2 to 40 pascal seconds --"Pa.s"), . . .

SUMM . . . 8, then the intermediate concentrate is translucent and generally homogeneous. The resulting foam is creamy and exhibits a satisfactory foam **viscosity**. For example, when the HLB is

adjusted to 7.5, a very creamy stable foam with a foam **viscosity** on the order of 31,000 cps (31 Pa.s) may be obtained. When the HLB value was below about 4.5, then excessively creamy foams were produced which exhibited a reduced foam **viscosity**. Samples with an HLB value of 4.9 exhibited a creamy foam and yielded generally a **viscosity** reading of over 20,000 cps (20 Pa.s). Samples with HLB values of 9.7 provided oily or tacky foams with reduced **viscosities** on the order of 15,000 cps (15 Pa.s).

SUMM In general, sufficient amounts of polyethoxylated fatty **alcohol** are employed to provide a stable intermediate **concentrate** and a stable foam. For this and other purposes, from about 0.5-10% by weight is employed, more preferably 2.5% by.

SUMM . . . be circumstances which would permit more or less to be used. The intermediate concentrate may be prepared by admixing the **ethanol**, **isopropanol** or mixtures thereof with the gelling agent and stirring. Next, in sequence, the water, preferably deionized water, is added; the.

SUMM **Carbomer** 95--an addition polymer of acrylic acid crosslinked with a polyallyl ether of sucrose available from B.F. Goodrich Chemicals Group, Cleveland, . . .

DETD

Ingredients	Amount
-------------	--------

S.D. Alcohol 40-A	60.00
<b>Carbomer</b> 951	0.20
Deionized Water	34.50
TEA (85%)	0.20
Ritapro 300	5.00
Fragrance	0.10
	100.00

DETD To prepare the mousse composition the **Carbomer** 951 was added to the alcohol at room temperature and stirred for five minutes. The deionized water was then added, . . .

DETD The product yielded a creamy stable foam with the following foam density and foam **viscosity**:

DETD (B) Foam **Viscosity**

DETD . . . 12 rpm, and measurement was made at room temperature (20° -22° C.) after a period of one minute. The measured **viscosity** was 22,035 centipoise (22.035 Pa.s).

DETD . . . manner as in Example I except that the levels of Ritapro 300 were varied to determine their effect on foam **viscosity**.

DETD

Ingredients	Amount	Ex. 2	Ex. 3	Ex. 4	Ex. 5	Ex. 6
-------------	--------	-------	-------	-------	-------	-------

S.D. Alcohol 40-A	60.00	60.00	60.00	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20	0.20	0.20	0.20
Deionized Water	39.00	38.50	37.00	35.50	34.50
TEA (85%)	0.20	0.20	0.20	0.20	0.20
Ritapro 300	0.50				

DETD The measurements for foam density and foam **viscosity** for each sample were made as in Example 1. .

DETD

Example	Foam Density	Foam Viscosity	Foam Evaluation
2	0.090	3081 cps (3.081 Pa.s)	Very wet and airy
3	0.089	6047 cps (6.047 Pa.s)	Wet and creamy
4	0.066		

DETD The measured foam **viscosities** were within the general desired range from 2,000 to 40,000 cps (2 to 40 Pa.s). The **viscosity** measurements and foam quality were more satisfactory when the concentration of Ritapro 300 was in the range of 4-5% weight.

DETD . . . lauryl alcohol, a C.sub.12 alcohol (Comparative Examples 1-4) and myristyl alcohol, a C.sub.14 alcohol (Comparative Examples 5-8) respectively, on foam **viscosity**. The amount of Ritapro 300 was reduced in proportion to the amount of lauryl (or myristyl) alcohol added. Formulations C.. . .

Amount				
Ingredients	C.E. 1	C.E. 2	C.E. 3	C.E. 4
S.D. Alcohol 40-A				
	60.00	60.00	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20	0.20	0.20
Deionized Water				
	34.50	34.50	34.50	34.50
TEA (85%)	0.20	0.20	0.20	0.20
Ritapro 300	3.75	2.50	1.25	--
Lauryl. . .				

DETD In the following Table 1, the measurements for foam density and foam **viscosity** were made as in Examples 1-6. As is apparent from the results, lauryl alcohol and myristyl alcohol cannot be used. . .

DETD TABLE 1

Example	Foam		Foam Evaluation
	Density	<b>Viscosity</b>	
CE 1	0.058	14820 cps (14.82 Pa.s)	unduly airy, slow- breaking foam
CE 2	0.044	10140 cps	wet, very quick-

Amount					
Ingredients	CE 9	CE 10	CE 11	CE 12	CE 13
SD-Alcohol-40A					
	60.00	60.00	60.00	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20	0.20	0.20	0.20
Deionized Water					
	34.50	34.50	34.50	34.50	34.50
TEA (85%)	0.20	0.20	0.20	0.20	0.20
Ritapro 300	2.50.				

Example	HLB	Foam		Foam Evaluation
		Density	<b>Viscosity</b>	
CE 9	4.9	0.063	43680 cps creamy (43.68 Pa.s)	
CE 10	7.5	0.084	45240 cps very creamy (45.24 Pa.s)	
CE 11.				

DETD . . . of 4.9 provided creamy foam. At the HLB value of 7.5, a very cream, thick foam was obtained. The higher **viscosity** provided an extremely creamy foam which remained stable for a longer period of time, thereby increasing the availability of the. . .

Amount				
--------	--	--	--	--

Ingredients	CE 14	CE 15
-------------	-------	-------

SD-Alcohol-40A	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20
Deionized Water	34.50	34.50
TEA (85%)	0.20	0.20
Ritapro 300	0.00	0.00
Brij 72	5.00	0.00
Brij 721	0.00	5.00
Fragrance	0.10	0.10

DETD

Example	HLB	Density	Viscosity	Foam Evaluation
---------	-----	---------	-----------	-----------------

CE 14	4.9	0.085	24180 cps (24.18 Pa.s)	unduly wet & glossy
CE 15	15.5	0.0	0.0	no foam

DETD

Ingredients	Amount
-------------	--------

S.D. Alcohol 40-A	60.00
<b>Carbomer</b> 951	0.20
Deionized Water	34.50
TEA (85%)	0.20
Ritapro 300	2.50
Brij 72	1.875
Brij 721	0.625
Fragrance	0.10
	100.00

DETD Foam Viscosity--30420 cps (30.42 Pa.s)

DETD . . . was added to extend the antimicrobial property of the mousse by providing a long-term residual killing effect. In place of **Carbomer** 951, which is an anionic water-dispersible polymeric gelling agent, a nonionic cellulosic thickener was used. That was deemed necessary since. . .

DETD

Example	Foam Density	Foam Viscosity	Foam Evaluation
---------	--------------	----------------	-----------------

8	0.050	29920 cps (29.92 Pa.s)	creamy, stable
9	0.049	30050 cps (30.05 Pa.s)	creamy, stable
10	0.056	29850. . .	

DETD

Ingredients	Amount
-------------	--------

SD Alcohol 40-A	60.00
<b>Carbomer</b> 951	0.20
Deionized Water	30.50
TEA (85%)	0.20
Ritapro 300	5.00
Q5-0158A (silicone wax)	1.00
Fragrance	0.10
Glycerine (humectant)	3.00
	100.00

DETD		
Foam Density	Foam Viscosity	Foam Evaluation
0.053	31200 cps (31.20 Pa.s)	very creamy

DETD					
	Amount				
Ingredients	Ex. 14	Ex. 15	Ex. 16	Ex. 17	Ex. 18

SD Alcohol 40-A	60.00	60.00	60.00	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20	0.20	0.20	0.20
Deionized Water	34.50	34.50	34.50	34.50	24.50
TEA (85%)	0.20	0.20	0.20	0.20	0.20
Ritapro 300	2.50				

DETD			
Example	Foam Density	Foam Viscosity	Foam Evaluation
14	0.12	37440 cps (37.44 Pa.s)	creamy rich
15	0.11	38610 cps (38.61 Pa.s)	creamy, soft
16	0.06	17550 cps	creamy foam.

DETD		
	Amount	
Ingredients	Ex. 19	Ex. 20

SD-Alcohol-40A	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20
Deionized Water	32.50	32.60
TEA (85%)	0.20	0.20
Ritapro 300	5.00	2.50
Salicylic acid	2.00	--
Fragrance	0.10	--
Brij 72	--	1.875
Brij.		

DETD			
Example	Foam Density	Foam Viscosity	Foam Evaluation
19	0.064	31980 cps (31.98 Pa.s)	creamy, rich texture; skin soft after application
20	0.050	31200 cps (31.20 Pa.s)	creamy, oily

DETD			
	Amount		
Ingredients	Ex. 21	Ex. 22	Ex. 23

SD Alcohol 40-A	60.00	60.00	60.00
<b>Carbomer</b> 951	0.20	0.20	0.20
Deionized Water	29.85	27.60	23.10
Glycerine	1.50	3.00	6.00
TEA (85%)	0.20	0.20	0.20

Petrolatum 0.75 1.50 3.00  
 Ritapro 300 2.50 . . .

DETD The test results for foam density and **viscosity** were as follows:

DETD

Example	Foam Density	Foam Viscosity	Foam Evaluation
21	0.0825	20670 cps (20.67 Pa.s)	creamy, soft feel
22	0.0775	20670 cps (20.67 Pa.s)	creamy, soft feel
23	0.0575	10920 . . .	

DETD

Foam Density	Foam Viscosity	Foam Evaluation
0	0	no foam formed

DETD

Foam Density	Foam Viscosity	Foam Evaluation
0.142	2730 cps (2.73 Pa.s)	very runny

DETD

Nonpressurized Intermediate	Amount
Cetyl alcohol	1.0
Polawax	4.0
1% Veegum solution	15.0
Aluminum chlorohydroxide	19.5
Aluminum sulfate	7.0
Aluminum chlorohydroxy allantoinate	0.5
<b>Ethanol</b>	39.9
Fragrance	0.1
Water	13.0

DETD . . . were added (aluminum chlorohydroxide in water and aluminum sulfate), heated to 70° C. and added to the Polawax mixture. The **ethanol** and fragrance were then added. At 50-60° C. the sample was pressurized with 10% by weight of isobutane propellant.

DETD

Foam Density	Foam Viscosity	Foam Evaluation
--------------	----------------	-----------------

0.05	1404 cps (1.404 Pa.s)	light, large bubbles, quick breaking
------	--------------------------	---

DETD

Foam Density	Foam Viscosity	Foam Evaluation
--------------	----------------	-----------------

0.055	780 cps (0.78 Pa.s)	light, large bubbles, quick breaking
-------	------------------------	---

DETD

TABLE 2

Product	Untreated	Treated	
Inventive High Alcohol	7.12	3.30	S. Marcescens
Content Mousse	6.37	2.84	E. coli
Alcohol Wipe	7.35	6.31	
	6.65	5.70	
DELIVER .TM. Alcohol	7.35	4.08	

DET D As can be seen from the above results the **high alcohol** content mousse of the invention reduced the bacterial colony count by a factor of almost 10.<sup>sup.4</sup>. The present mousse composition. . .

CL M What is claimed is:  
 1. A **high alcohol** content aerosol antimicrobial mousse composition comprising: (I) an intermediate concentrate having (a) from about 52% -75% by weight of the intermediate concentrate of **ethanol, isopropanol** or mixtures thereof; (b) from about 0.1%-1.5% by weight of the intermediate concentrate of a water-dispersible polymeric gelling agent; (c). . . weight of the intermediate concentrate of an amphiphilic nonionic stabilizer consisting essentially of (i) from about 0.5%-5.0% of the intermediate **concentrate** of at least one **alcohol** of the formula ROH where R is a hydrocarbon group having from 16 to 22 carbons; and (ii) from about. . .  
 13. The composition according to claim 1, wherein the alcohol is **ethanol**.

17. The composition according to claim 15, wherein the base is selected from an organic amine, **sodium hydroxide** or **ammonium hydroxide**.

23. A **high alcohol** content aerosol antimicrobial mousse composition comprising: (I) an intermediate concentrate having (a) from about 52%-75% by weight of the intermediate concentrate of **ethanol, isopropanol** or mixtures thereof; (b) from about 0.1%-1.5% by weight of the intermediate concentrate of a water-dispersible polymeric gelling agent; (c). . . weight of the intermediate concentrate of an amphiphilic nonionic stabilizer consisting essentially of (i) from about 0.5%-5.0% of the intermediate **concentrate** of at least one **alcohol** of the formula ROH where R is a hydrocarbon group having from 16 to 22 carbons; and (ii) from about. . .

ACCESSION NUMBER: 92:98930 USPATFULL  
 TITLE: **High alcohol** content aerosol antimicrobial mousse  
 INVENTOR(S): Lins, Claudio L. K., Racine County, WI, United States  
 PATENT ASSIGNEE(S): S. C. Johnson & Son, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5167950		19921201
APPLICATION INFO.:	US 1991-676917		19910328 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Page, Thurman K.		
ASSISTANT EXAMINER:	Benston, Jr., William E.		
NUMBER OF CLAIMS:	23		
EXEMPLARY CLAIM:	1		